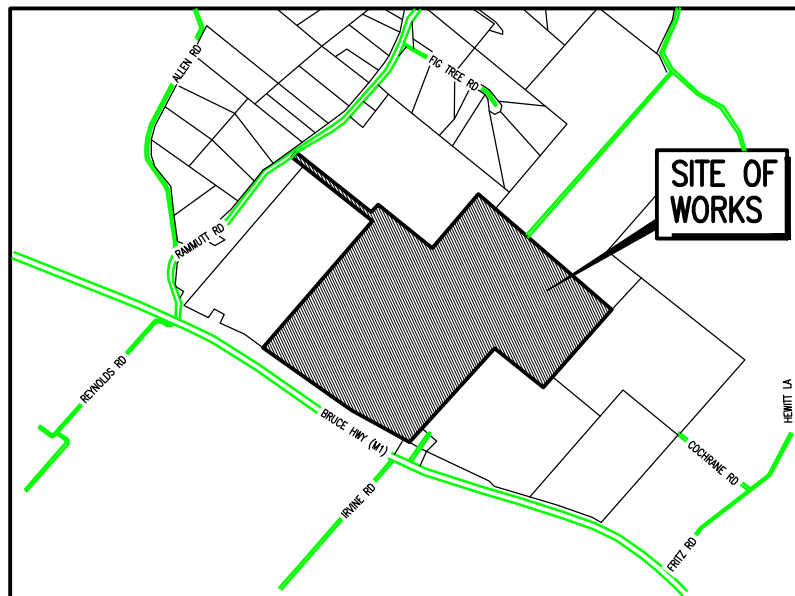




SITE LOCATION PLAN N.T.S.

ROADWORKS & DRAINAGE REFERENCE DRAWINGS

- | | |
|---------------|---|
| IPWEAQ D-0010 | ACCESS CHAMBER – DETAILS Ø1050 TO Ø2100 |
| IPWEAQ D-0030 | BEDDING & BACK FILL TO RC PIPE CULVERTS |
| IPWEAQ D-0041 | SEDIMENT CONTROL DEVICES |
| IPWEAQ D-0081 | INLETS & OUTLETS TO STORMWATER PIPES (STONE PITCHED) |
| IPWEAQ G-0100 | TREE PLANTING |
| IPWEAQ R-050 | RESIDENTIAL DRIVEWAY BREAKOUT TYPE |
| IPWEAQ R-0130 | STREET NAME SIGN |
| IPWEAQ R-0131 | TRAFFIC CONTROL DEVICES |
| IPWEAQ R-0140 | SUBSURFACE DRAINAGE |
| GRC R-01 | KERB & CHANNEL PROFILES |
| GRC R-02 | INVERT CROSSOVER DRIVEWAY |
| GRC R-03 | DRIVEWAY SLAB OR TRACK (CONCRETE) DWELLING HOUSE TYPE |
| GRC R-06 | DRAINAGE PITS KERB INLET LIP INLINE |
| GRC R-07 | RURAL ROAD TYPE CROSS SECTION |
| GRC R-08 | PUBLIC UTILITIES ALIGNMENTS |
| GRC R-09 | URBAN STREET TYPE CROSS SECTION |
| GRC R-14 | BURIED FLEXIBLE PIPELINES UNDER ROADS |
| GRC R-15 | TABLE DRAIN CROSSING |
| MRD 1305 | ENDS TO PIPE CULVERTS |

PLAN INDEX

- | | | |
|---------|---|--|
| 0828-31 | H | STAGE 2 SITE PLAN |
| 0828-32 | E | STAGE 2 ROADWORK'S DRAINAGE AND LAYOUT PLAN 1 |
| 0828-33 | C | STAGE 2 ROADWORK'S DRAINAGE AND LAYOUT PLAN 2 |
| 0828-34 | C | STAGE 2 ROADWORK'S DRAINAGE AND LAYOUT PLAN 3 |
| 0828-35 | E | STAGE 2 ROADWORK'S DRAINAGE AND LAYOUT PLAN 4 |
| 0828-07 | A | STAGE 2 ROADWORK'S DRAINAGE AND BULK EARTHWORK'S LAYOUT PLAN |
| 0828-37 | F | STAGE 2 OVERLANDER AV – ROAD 3 INTERSECTION SETOUT AND DRAINAGE DETAILS |
| 0828-38 | D | STAGE 2 ROAD 3 – ROAD 4 INTERSECTION SETOUT AND DRAINAGE DETAILS |
| 0828-39 | B | STAGE 2 ROAD 3 CUL-DE-SAC SETOUT AND DRAINAGE DETAILS |
| 0828-40 | A | STAGE 2 OVERLANDER AV LONGITUDINAL SECTION CH704.723 – CH871.689 |
| 0828-41 | B | STAGE 2 OVERLANDER AV CROSS SECTIONS CH704.723 – CH871.689 |
| 0828-42 | B | STAGE 2 ROAD 3 LONGITUDINAL SECTION CH0.000 – CH486.027 |
| 0828-43 | A | STAGE 2 ROAD 3 CROSS SECTIONS CH20.000 – CH320.000 |
| 0828-44 | A | STAGE 2 ROAD 3 CROSS SECTIONS CH340.000 – CH430.000 |
| 0828-45 | A | STAGE 2 ROAD 3 CROSS SECTIONS CH441.292 – CH474.927 |
| 0828-46 | C | STAGE 2 ROAD 4 LONGITUDINAL SECTION CH0.000 – CH140.780 |
| 0828-47 | A | STAGE 2 ROAD 4 CROSS SECTIONS CH20.000 – CH140.078 |
| 0828-48 | * | STAGE 2 DRIVEWAY LONGITUDINAL & CROSS SECTIONS |
| 0828-49 | B | STAGE 2 DRIVEWAY LONGITUDINAL & CROSS SECTIONS TO LOT 18 & TYPICAL ACCESS SECTIONS TO LOT 17 |
| 0828-50 | * | STAGE 2 DRAINAGE CATCHMENT PLAN |
| 0828-51 | B | STAGE 2 DRAINAGE DETAILS 1 – CULVERT DETAILS J & N |
| 0828-52 | B | STAGE 2 DRAINAGE DETAILS 2 – CULVERT DETAILS P & R |
| 0828-53 | A | STAGE 2 DRAINAGE LONGITUDINAL SECTION |
| 0828-54 | A | STAGE 2 DRAINAGE CALCULATION PLAN |
| 0828-55 | A | STAGE 2 SEDIMENT AND EROSION CONTROL PLAN 1 |
| 0828-56 | A | STAGE 2 SEDIMENT AND EROSION CONTROL PLAN 2 |

SERVICE LOCATIONS

It is the responsibility of the Foreman to contact the relevant service authorities to ascertain the exact location of services prior to construction.

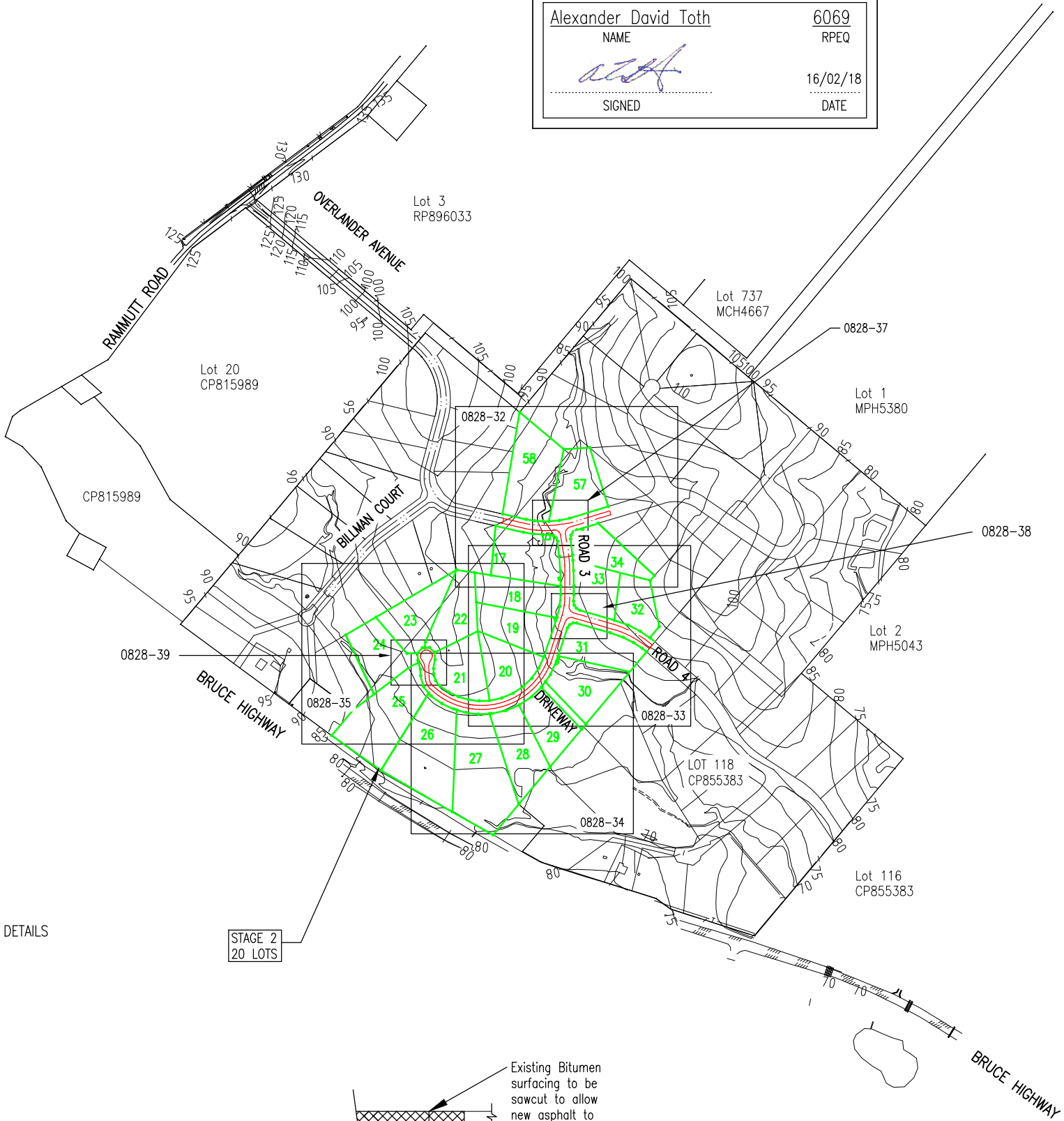


NOTE: TELSTRA LOCATIONS ARE APPROXIMATE ONLY FROM TELSTRA PLANS. LOCATIONS ARE TO BE CONFIRMED PRIOR TO START OF CONSTRUCTION. PHONE DBYD SERVICE LOCATIONS ON 1100 FOR DETAILS.



NOTE: ENERGEX LOCATIONS ARE APPROXIMATE ONLY FROM ENERGEX PLANS. LOCATIONS ARE TO BE CONFIRMED PRIOR TO START OF CONSTRUCTION. PHONE DBYD SERVICE LOCATIONS ON 1100 FOR DETAILS.

Alexander David Toth	6069
NAME	RPEQ
	16/02/18
SIGNED	DATE



	EXTENTS OF EXCAVATION EARTHWORKS (TOPSOIL 75mm THICK & GRASS SEED & TURF FOOTPATH 2m WIDE) REFER TO SPECIFICATION FOR EARTHWORKS	
	EXTENTS OF FILL EARTHWORKS (TOPSOIL 75mm THICK & GRASS SEED & TURF FOOTPATH 2m WIDE) REFER TO SPECIFICATION FOR EARTHWORKS	
	EXTENTS OF 1:2 BATTERS. TYNE HORIZONTAL GROOVES IN BATTERS THEN ADD 50mm TOPSOIL & 75mm MULCH & PRESS INTO BANK. COVER WITH OPEN WEAVE JUTE MATTING & PIN WHERE MULCH IS BELOW THE OBVERT OF PIPE	
	NEW 2 OR 3 COAT BITUMEN SEAL AS SPECIFIED ON LONGITUDINAL SECTION	

 FRC RRJ CLASS 2<=750Ø. RCP RBJ CL2>750Ø
 STORMWATER PIPE

9
X
STORM WATER & HEADWALL REFERENCE
REFER TO PLANS 0828-51 & 52 FOR
CULVERT DETAILS


 STORM WATER STRUCTURE REFERENCE
 REFER TO PLANS 0828-32 & 34

⊕ (99.999) FINISH SURFACE LEVEL

— ← ← ← ← TABLE DRAIN, WHERE DISTURBED TOPSOIL &
GRASS SEED TURF STRIPS AT 3m CENTRES

 V EXISTING OVERHEAD POWER

EXISTING TELSTRA CABLE LOCATE
ACCURATELY BEFORE CONSTRUCTION

 EXISTING TREES

EXISTING BITUMEN ROAD EDGE

_____ EXISTING BOUNDARY

 EDGE OF EXISTING VEGETATION

_____, _____, _____ EXISTING FENCELINE

— — — — — EXISTING BOTTOM OF BANK
 ~~~~~~ EXISTING BED OF BANK

EXISTING TOP OF BANK  
EXISTING KERR LIP

EXISTING KERB LINE  
FUTURE CENTRELINE

— — — — — FUTURE KERB LIP

— — — — FUTURE STORMWATER EASEMENTS

DRIVEWAY FUTURE DRIVEWAY LOCATION

EXISTING PAVEMENT TO BE CUT BACK A  
MINIMUM OF 150mm AND UNTIL  
SUITABLE PAVEMENT MATERIAL AND TO  
PROVIDE CLEAN GRAVEL FACE FOR NEW  
PAVEMENT

OVERLANDER AVENUE

DAM IN LOT 17 TO BE  
MINIMUM 6m FROM ROAD  
RESERVE & ADJACENT  
BOUNDARIES

DRIVEWAY BREAKOUT TO GRC STD DRAWING  
R-03 AND VERGE PROFILE TO GRC-09.  
CONSTRUCT 32m L 3m W DRIVEWAY WITH 2  
COAT BITUMEN SEAL TO SECTION 0828-49

DRIVEWAY TO LOT 17

| POINT | EASTING      | NORTHING      | LEVEL  |
|-------|--------------|---------------|--------|
| 1     | X=462384.025 | Y=7108360.883 | 81.93  |
| 2     | 462383.364   | 7108357.550   | 82.121 |
| 3     | 462383.772   | 7108348.121   | 81.900 |
| 4     | 462383.275   | 7108341.377   | 82.396 |
| 5     | 462380.805   | 7108329.645   | 82.406 |

3/D OUTLET VELOCITY 1.11m/s PROVIDE 3.0m LONG  
X 2.0m WIDE AT OUTLET.  
200Ø ROCK SPALL DISSIPATOR TO DETAIL ON PLAN  
0828-50. PROVIDE EASEMENT OVER PORTION IN  
PRIVATE PROPERTY AREA APPROXIMATELY 7m X 11m

NOTE COORDINATES ARE REFERENCED TO ASCI FILE NOT ACAD DRAWING

| HG IP for "Overlander Av CL" -> "Overlander Av CL" |          |            |             |            |         |          |           |
|----------------------------------------------------|----------|------------|-------------|------------|---------|----------|-----------|
| Pt                                                 | Chainage | Easting    | Northing    | Bearing    | Radius  | A.Length | D.Angle   |
| IP1                                                | 0.000    | 461961.960 | 7108861.049 | 130°04'56" |         |          |           |
| TC                                                 | 341.881  | 462223.542 | 7108640.917 | 130°04'56" |         |          |           |
| IP2                                                | 404.091  | 462272.959 | 7108595.963 |            | 110.000 | 124.418  | 64°48'21" |
| CT                                                 | 466.300  | 462259.021 | 7108528.491 | 194°53'17" |         |          |           |
| TC                                                 | 545.339  | 462238.714 | 7108452.105 | 194°53'17" |         |          |           |
| IP3                                                | 585.454  | 462225.426 | 7108402.123 |            | 50.000  | -80.228  | 91°56'06" |
| CT                                                 | 625.568  | 462275.828 | 7108390.530 | 102°57'11" |         |          |           |
| TC                                                 | 735.954  | 462383.405 | 7108365.787 | 102°57'11" |         |          |           |
| IP4                                                | 774.993  | 462422.334 | 7108356.833 |            | 150.000 | -78.078  | 29°49'24" |
| CT                                                 | 814.032  | 462460.559 | 7108368.426 | 73°07'47"  |         |          |           |
| IP5                                                | 906.692  | 462549.232 | 7108395.317 | 102°57'11" |         |          |           |

| NAME/COORD<br>STRUCTURE           | STRUCTURE<br>TYPE                                                            | CHAINAGE                             | LIP / LID<br>RL | OFFSET<br>LIP/CEN | KERB<br>GRADE |
|-----------------------------------|------------------------------------------------------------------------------|--------------------------------------|-----------------|-------------------|---------------|
| 3/K X=462520.259<br>Y=7108381.828 | STD IPWEAQ MANHOLE<br>1050mm DIA TO IPWEAQ<br>STD DRG D-0010<br>CAP PIPE END | 875.052                              | IL 81.137       | 4.50              | 4.5%          |
| 4/K X=462478.175<br>Y=7108370.920 | GRC SAG GULLY TO GRC<br>STD DRG R-06 AND DMR<br>STD DRG 1444                 | 831.613                              | LIP 80.820      | 2.725             | 4.5%          |
| 5/K X=462474.676<br>Y=7108364.441 | PRECAST OUTLET 750mm<br>DIA TO IPWEAQ DRG<br>D-0080                          | 826.384                              | IL 79.050       | 7.930             | N/A           |
| 1/M X=462476.593<br>Y=7108376.135 | GRC SAG GULLY TO GRC<br>STD DRG R-06 AND DMR<br>STD DRG 1444                 | 831.613                              | LIP 80.820      | 2.725             | -0.95%        |
| 1/D X=462422.394<br>Y=7108365.544 | GRC SAG GULLY<br>TO GRC STD DRG R-06<br>AND DMR STD DRG 1444                 | 775.360                              | LIP 80.598      | 3.475             | 0%            |
| 2/D X=462422.649<br>Y=7108358.598 | GRC SAG GULLY<br>TO GRC STD DRG R-06<br>AND DMR STD DRG 1444                 | 775.360                              | LIP 80.598      | 3.475             | 0%            |
| 3/D X=462422.853<br>Y=7108353.057 | PRE-CAST OUTLET<br>375 DIAM TO IPWEAQ<br>STD DRG D-0080                      | 775.360                              | IL 78.500       | 9.02              | N/A           |
| 1/S X=462381.101<br>Y=7108348.329 | IPWEAQ TYPE 1<br>FIELD INLET 900x600<br>CONC LIP LEVEL 81.60                 | PIPE INVERT<br>IL 80.50<br>LENGTH 8m |                 |                   |               |
| 2/S X=462389.528<br>Y=7108347.707 | PRE-CAST OUTLET<br>450 DIA TO IPWEAQ<br>STD DRG D-0080                       | PIPE INVERT<br>IL 80.40              |                 |                   |               |



**Civil, Environmental &  
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|          |     |             |
|----------|-----|-------------|
| designed | AH  | datum AHD   |
| drawn    | MM  |             |
| checked  | ADT | Origin (B.M |

|                                |  |
|--------------------------------|--|
| approved                       |  |
| SURVEYED BY                    |  |
| <b>MURRAY &amp; ASSOCIATES</b> |  |
| PHONE 5441 2188                |  |

project

**OPERATIONAL WORKS FOR 20  
LOTS DA15764 BRUCE  
HIGHWAY (NORTH) CHATSWORTH  
STAGE 2**

Client

**ROBERTS BROTHERS PTY LTD.**

title  
**ROADWORKS DRAINAGE &  
LAYOUT PLAN 1**

**Lot 371, 372 & 374  
ON MCH4667**

**PARISH OF GYMPIE  
COUNTY : MARCH  
GYMPIE REGIONAL COUNCIL  
LOCALITY : CHATSWORTH**

SCALE



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| REVISIONS |                                |      |
|-----------|--------------------------------|------|
| item      | revision details               | date |
| E         | REVISED SW COORDS (MARKED RED) | 06/1 |
| O         | AS CONSTRUCTED                 | 02/1 |
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Sheet 2 of 26 sheets

drawing number

0828-32  
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date 20th January 2011

## STORMWATER EASEMENTS

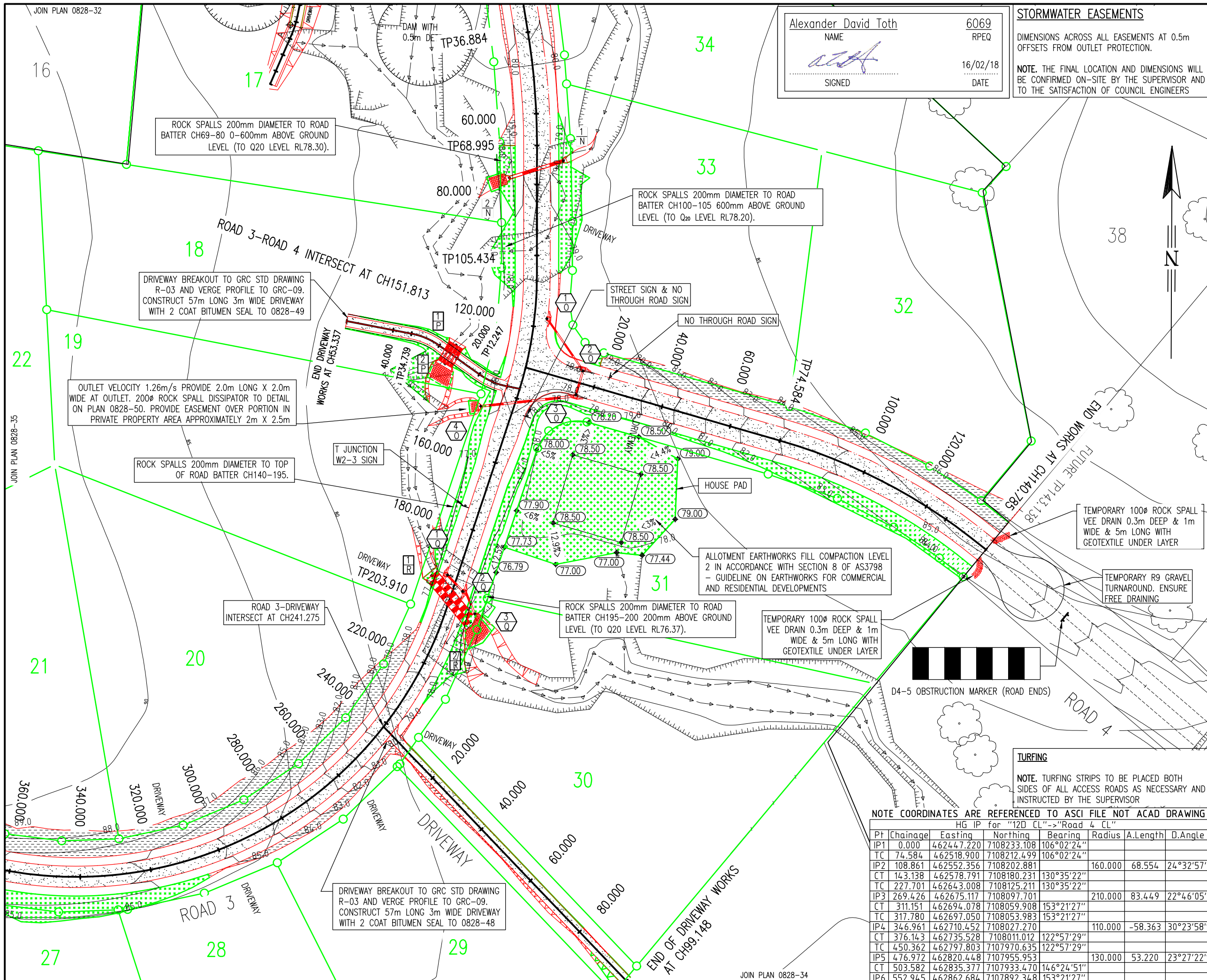
DIMENSIONS ACROSS ALL EASEMENTS AT 0.5m OFFSETS.

**NOTE.** THE FINAL LOCATION AND DIMENSIONS WILL BE CONFIRMED ON-SITE BY THE SUPERVISOR AND TO THE SATISFACTION OF COUNCIL ENGINEERS

## TURFING

**NOTE.** TURFING STRIPS TO BE PLACED BOTH SIDES OF ALL ACCESS ROADS AS NECESSARY AND INSTRUCTED BY THE SUPERVISOR





Alexander David Toth  
NAME  
6069  
RPEQ  
16/02/18  
DATE  
SIGNED

**STORMWATER EASEMENTS**  
DIMENSIONS ACROSS ALL EASEMENTS AT 0.5m OFFSETS FROM OUTLET PROTECTION.  
**NOTE.** THE FINAL LOCATION AND DIMENSIONS WILL BE CONFIRMED ON-SITE BY THE SUPERVISOR AND TO THE SATISFACTION OF COUNCIL ENGINEERS

**Callaghan & Toth**  
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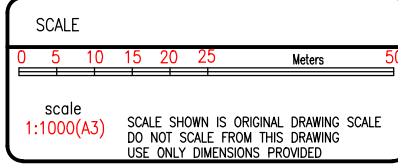
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| designed                                                         | AH  | datum         | AHD                    |
| drawn                                                            | MM  |               |                        |
| checked                                                          | ADT | Origin (B.M.) | PSM 54085<br>RL 82.078 |
| approved                                                         |     |               |                        |
| SURVEYED BY<br><b>MURRAY &amp; ASSOCIATES</b><br>PHONE 5441 2188 |     |               |                        |

project  
**OPERATIONAL WORKS FOR 20 LOTS DA15764 BRUCE HIGHWAY (NORTH) CHATSWORTH STAGE 2**

Client  
**ROBERTS BROTHERS PTY LTD.**

title  
**ROADWORKS DRAINAGE & LAYOUT PLAN 2**

**Lot 371, 372 & 374 ON MCH4667**  
**PARISH OF GYMPIE**  
**COUNTY : MARCH**  
**GYMPIE REGIONAL COUNCIL**  
**LOCALITY : CHATSWORTH**



| REVISIONS |                               |       |
|-----------|-------------------------------|-------|
| revision  | details                       | date  |
| 1         | ADDED PROPOSED DWAY LOCATIONS | 10/11 |
| 2         | AS CONSTRUCTED                | 02/18 |

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**AS CONSTRUCTED**  
Sheet 3 of 26 sheets  
drawing number  
**0828-33**  
0  
date 20th January 2011

NOTE COORDINATES ARE REFERENCED TO ASCI FILE NOT ACAD DRAWING

| Pt  | Chainage | Easting    | Northing    | Bearing    | Radius  | A.Length | D.Angle   |
|-----|----------|------------|-------------|------------|---------|----------|-----------|
| IP1 | 0.000    | 46244.7220 | 7108233.108 | 106°02'24" |         |          |           |
| TC  | 74.584   | 462518.900 | 7108212.499 | 106°02'24" |         |          |           |
| IP2 | 108.861  | 462552.356 | 7108202.881 |            | 160.000 | 68.554   | 24°32'57" |
| CT  | 143.138  | 462578.791 | 7108180.231 | 130°35'22" |         |          |           |
| TC  | 227.701  | 462643.008 | 7108125.211 | 130°35'22" |         |          |           |
| IP3 | 269.426  | 462675.117 | 7108097.701 |            | 210.000 | 83.449   | 22°46'05" |
| CT  | 311.151  | 462694.078 | 7108059.908 | 153°21'27" |         |          |           |
| TC  | 317.780  | 462697.050 | 7108053.983 | 153°21'27" |         |          |           |
| IP4 | 346.961  | 462710.452 | 7108027.270 |            | 110.000 | -58.363  | 30°23'58" |
| CT  | 376.143  | 462735.528 | 7108011.012 | 122°57'29" |         |          |           |
| TC  | 450.362  | 462797.803 | 7107970.635 | 122°57'29" |         |          |           |
| IP5 | 476.972  | 462820.448 | 7107955.953 |            | 130.000 | 53.220   | 23°27'22" |
| CT  | 503.582  | 462835.377 | 7107933.470 | 146°24'51" |         |          |           |
| IP6 | 552.945  | 462862.684 | 7107892.348 | 153°21'27" |         |          |           |





## STORMWATER EASEMENTS

DIMENSIONS ACROSS ALL EASEMENTS AT 0.5m  
OFFSETS FROM OUTLET PROTECTION.

NOTE. THE FINAL LOCATION AND DIMENSIONS WILL  
BE CONFIRMED ON-SITE BY THE SUPERVISOR AND  
TO THE SATISFACTION OF COUNCIL ENGINEERS

## TURFING

NOTE. TURFING STRIPS TO BE PLACED BOTH  
SIDES OF ALL ACCESS ROADS AS NECESSARY AND  
INSTRUCTED BY THE SUPERVISOR

Alexander David Toth

NAME

6069

RPEQ

16/02/18

DATE

SIGNED

D4-5 OBSTRUCTION MARKER (ROAD ENDS)

3 COAT SEAL FROM  
CH455.000 TO THE END  
OF THE CUL-DE-SAC

EXISTING ALLOTMENT EARTHWORKS FILL COMPACTION  
LEVEL 2 IN ACCORDANCE WITH SECTION 8 OF  
AS3798 - GUIDELINE ON EARTHWORKS FOR  
COMMERCIAL AND RESIDENTIAL DEVELOPMENTS

DAM WITH  
0.5m DETENTION

EFFLUENT  
TREATMENT BUFFER

EFFLUENT  
TREATMENT AREA

DAM WITH  
0.5m DETENTION

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|          |     |               |                        |
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| designed | AH  | datum         | AHD                    |
| drawn    | MM  |               |                        |
| checked  | ADT | Origin (B.M.) | PSM 54085<br>RL 82.078 |

approved  
SURVEYED BY  
**MURRAY & ASSOCIATES**  
PHONE 5441 2188

project  
**OPERATIONAL WORKS FOR 20  
LOTS DA15764 BRUCE  
HIGHWAY (NORTH) CHATSWORTH  
STAGE 2**

Client  
**ROBERTS BROTHERS PTY LTD.**

title  
**ROADWORKS DRAINAGE &  
LAYOUT PLAN 4**

Lot 371, 372 & 374  
ON MCH4667  
PARISH OF GYMPIE  
COUNTY : MARCH  
GYMPIE REGIONAL COUNCIL  
LOCALITY : CHATSWORTH

SCALE  
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| REVISIONS |                               |       |
|-----------|-------------------------------|-------|
| revision  | details                       | date  |
| 1         | ADDED PROPOSED DWAY LOCATIONS | 10/11 |
| 2         | AS CONSTRUCTED                | 02/18 |

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**AS CONSTRUCTED**

Sheet 5 of 26 sheets

drawing number

**0828-35**  
0

date 20th January 2011



LEGEND



PROPOSED LAY BACK TYPE M1  
KERB & CHANNEL TO GRC STD DRG R-01



PROPOSED LIP LEVEL

INTERSECTION SETOUT DETAIL

KERB 1 KERB LIP AT PAVEMENT LEVEL

| POINT | EASTING    | NORTHING    | LEVEL  | DESC.     |
|-------|------------|-------------|--------|-----------|
| 1     | 462454.962 | 7108364.031 | 81.014 | CH807.514 |
| 2     | 462451.536 | 7108362.435 | 80.979 | 1/4 R     |
| 3     | 462448.919 | 7108359.708 | 80.843 | MID POINT |
| 4     | 462447.465 | 7108356.220 | 80.680 | 1/4 R     |
| 5     | 462447.370 | 7108352.442 | 80.563 | CH12.330  |

RAD 10.275 (LIP) ARC LENGTH 15.522

KERB 2 KERB LIP AT PAVEMENT LEVEL

| POINT | EASTING    | NORTHING    | LEVEL  | DESC.     |
|-------|------------|-------------|--------|-----------|
| 6     | 462429.667 | 7108359.017 | 80.639 | CH782.232 |
| 7     | 462433.460 | 7108358.620 | 80.661 | 1/4 R     |
| 8     | 462436.847 | 7108356.867 | 80.652 | MID POINT |
| 9     | 462439.362 | 7108354.000 | 80.610 | 1/4 R     |
| 10    | 462440.657 | 7108350.413 | 80.540 | CH13.262  |

RAD 10.275 (LIP) ARC LENGTH 15.343

Alexander David Toth

NAME

*Signature*

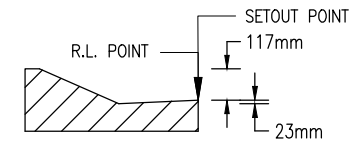
SIGNED

6069

RPEQ

16/02/18

DATE



SETOUT DETAILS - M1 MOUNTABLE  
TYPE KERB & CHANNEL (GRC R-01)

**Callaghan & Toth**  
Civil, Environmental & Hydraulic Engineers  
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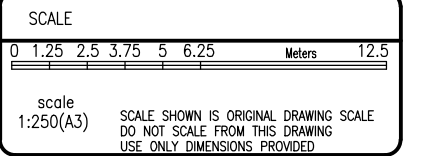
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| drawn                                                            | MM  |                                      |
| checked                                                          | ADT | Origin (B.M.) PSM 54085<br>RL 82.078 |
| approved                                                         |     |                                      |
| SURVEYED BY<br><b>MURRAY &amp; ASSOCIATES</b><br>PHONE 5441 2188 |     |                                      |

project  
**OPERATIONAL WORKS FOR 20  
LOTS DA15764 BRUCE  
HIGHWAY (NORTH) CHATSWORTH  
STAGE 2**

Client  
**ROBERTS BROTHERS PTY LTD.**

title  
**OVERLANDER AV-ROAD 3  
INTERSECTION SETOUT &  
DRAINAGE DETAILS**

Lot 371, 372 & 374  
ON MCH4667  
PARISH OF GYMPIE  
COUNTY : MARCH  
GYMPIE REGIONAL COUNCIL  
LOCALITY : CHATSWORTH



| REVISIONS |                     |       |
|-----------|---------------------|-------|
| revision  | revision details    | date  |
| F         | ADDED SW STRUCTURES | 06/17 |
| O         | AS CONSTRUCTED      | 02/18 |

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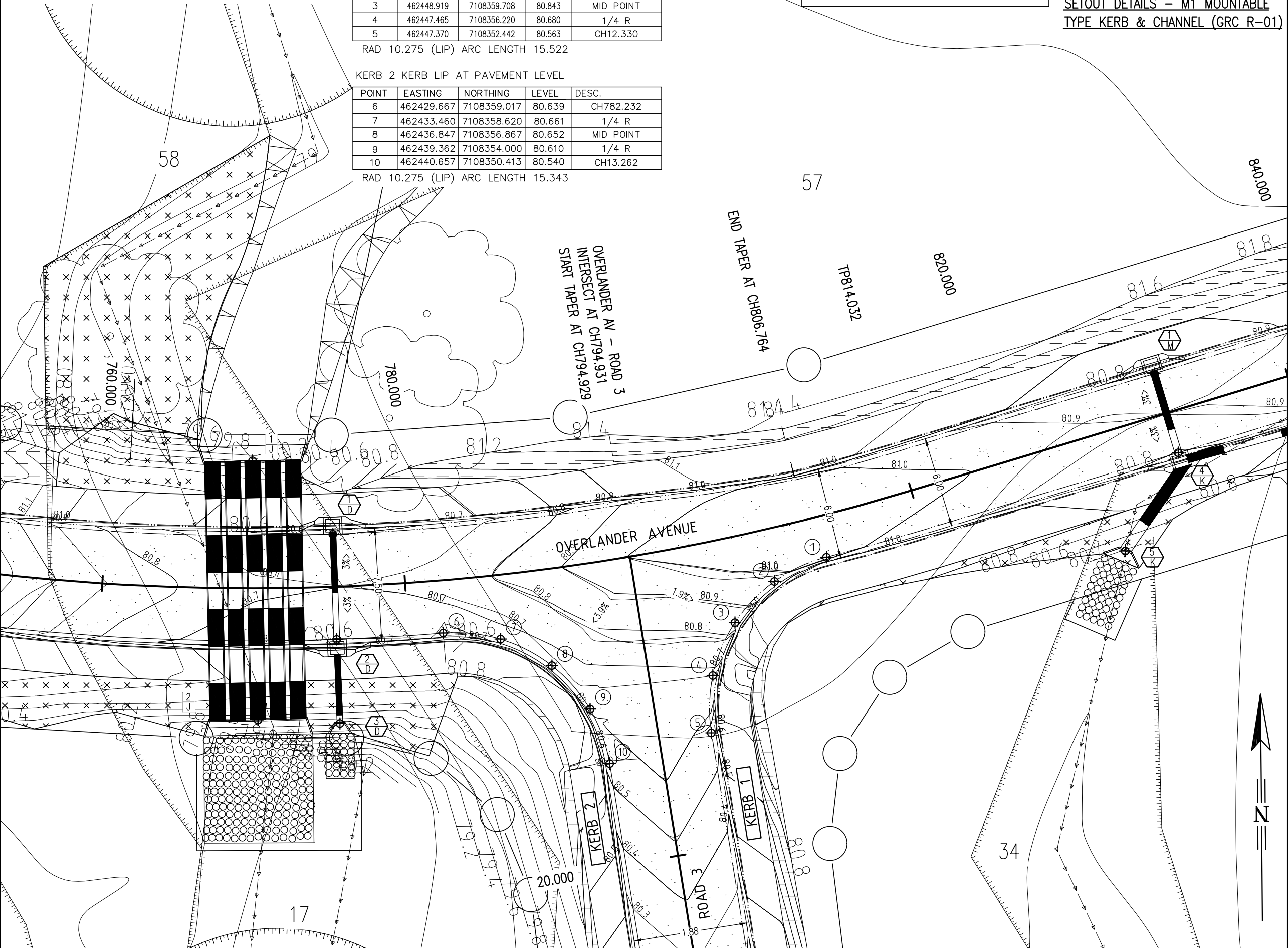
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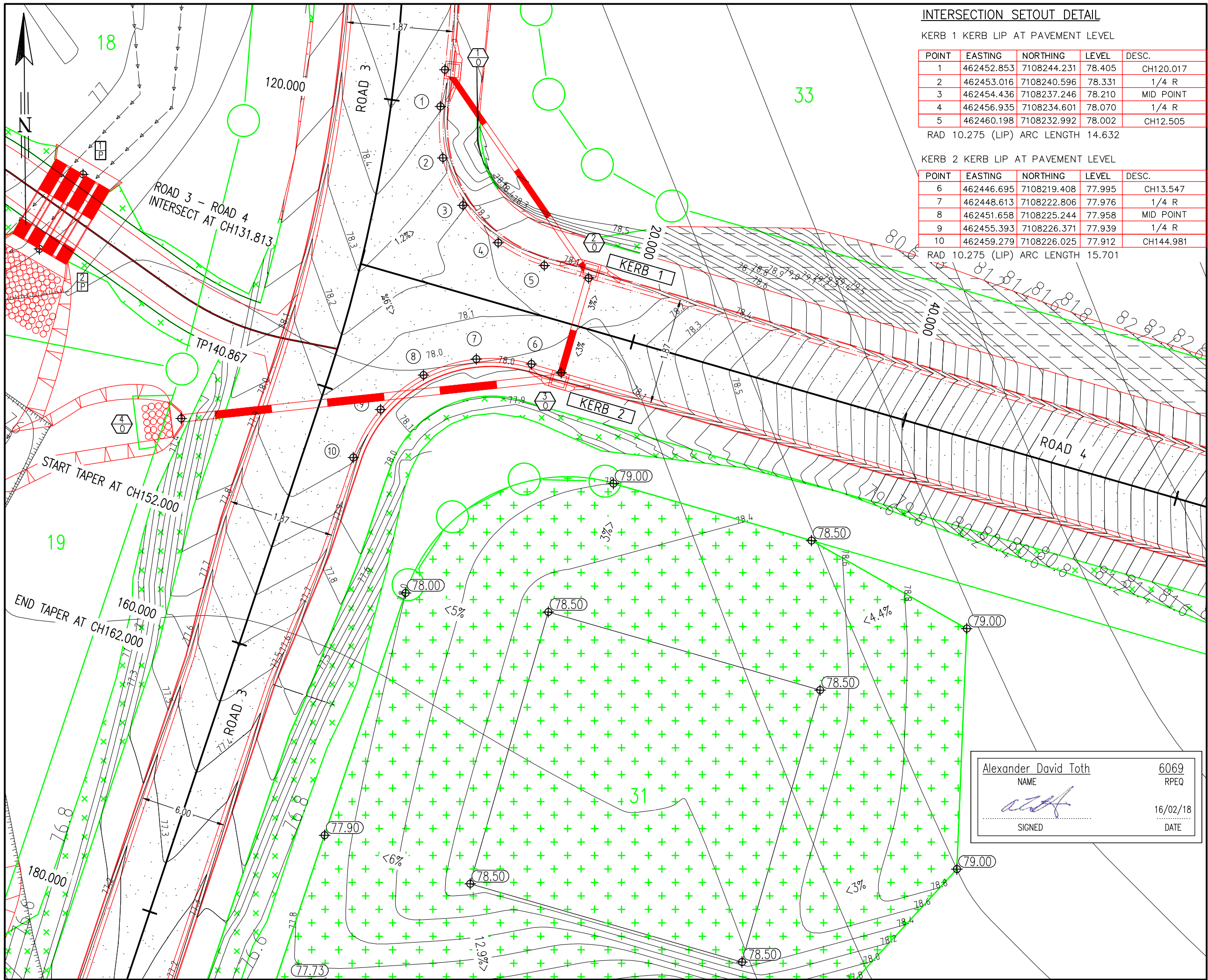
Sheet 7 of 26 sheets

drawing number

**0828-37**  
F

date 20th January 2011





INTERSECTION SETOUT DETAIL

KERB 1 KERB LIP AT PAVEMENT LEVEL

| POINT | EASTING    | NORTHING    | LEVEL  | DESC.     |
|-------|------------|-------------|--------|-----------|
| 1     | 462452.853 | 7108244.231 | 78.405 | CH120.017 |
| 2     | 462453.016 | 7108240.596 | 78.331 | 1/4 R     |
| 3     | 462454.436 | 7108237.246 | 78.210 | MID POINT |
| 4     | 462456.935 | 7108234.601 | 78.070 | 1/4 R     |
| 5     | 462460.198 | 7108232.992 | 78.002 | CH12.505  |

RAD 10.275 (LIP) ARC LENGTH 14.632

KERB 2 KERB LIP AT PAVEMENT LEVEL

| POINT | EASTING    | NORTHING    | LEVEL  | DESC.     |
|-------|------------|-------------|--------|-----------|
| 6     | 462446.695 | 7108219.408 | 77.995 | CH13.547  |
| 7     | 462448.613 | 7108222.806 | 77.976 | 1/4 R     |
| 8     | 462451.658 | 7108225.244 | 77.958 | MID POINT |
| 9     | 462455.393 | 7108226.371 | 77.939 | 1/4 R     |
| 10    | 462459.279 | 7108226.025 | 77.912 | CH144.981 |

RAD 10.275 (LIP) ARC LENGTH 15.701

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designed

drawn

checked

approved

AH

MM

ADT

datum AHD

Origin (B.M.)

PSM 54085  
RL 82.078

SURVEYED BY

PHONE 5441 2188

MURRAY & ASSOCIATES

project

OPERATIONAL WORKS FOR 20  
LOTS DA15764 BRUCE  
HIGHWAY (NORTH) CHATSWORTH  
STAGE 2

Client

ROBERTS BROTHERS PTY LTD.

title

ROAD 3 & ROAD 4  
INTERSECTION SETOUT &  
DRAINAGE DETAILS

Lot 371, 372 & 374  
ON MCH4667  
PARISH OF GYMPIE  
COUNTY : MARCH  
GYMPIE REGIONAL COUNCIL  
LOCALITY : CHATSWORTH

SCALE

0 1.25 2.5 3.75 5 6.25 12.5 Meters

scale 1:250(A3)

SCALE SHOWN IS ORIGINAL DRAWING SCALE  
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| REVISIONS |                   |       |
|-----------|-------------------|-------|
| revision  | details           | date  |
| 1         | ADD SW STRUCTURES | 06/17 |
| 2         | AS CONSTRUCTED    | 02/18 |

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Sheet 8 of 26 sheets

drawing number

0828-38

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date 20th January 2011

Alexander David Toth

NAME

SIGNED

6069

RPEQ

16/02/18

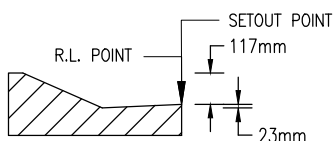
DATE



# LEGEND

PROPOSED LAY BACK TYPE  
KERB & CHANNEL TO GRC R-01

PROPOSED LIP KERB LEVEL  
(SPECIFIED IN SETOUT TABLE)



SETOUT DETAILS - M1 MOUNTABLE  
TYPE KERB & CHANNEL (GRC R-01)

Alexander David Toth  
NAME  
6069  
RPEQ  
16/02/18  
DATE  
SIGNED

INTERNAL ROAD 3 CUL-DE-SAC SETOUT TABLE

| POINT | EASTING    | NORTHING    | LEVEL  | DESC. & LIP CHAINAGE         |
|-------|------------|-------------|--------|------------------------------|
| 1     | 462234.381 | 7108150.107 | 90.116 | TP CH457.263                 |
| 2     | 462233.459 | 7108155.461 | 90.626 | MID R30.725 CH462.647        |
| 3     | 462231.149 | 7108160.379 | 90.964 | CTP CH467.645                |
| 4     | 462228.239 | 7108164.955 | 91.187 | PERP TO CUL CENTRE CH472.324 |
| 5     | 462228.095 | 7108170.315 | 91.328 | SEG CH477.685                |
| 6     | 462231.113 | 7108174.746 | 91.467 | TP CH482.004                 |
| 7     | 462236.152 | 7108176.576 | 91.613 | MID R8.725 CH482.004         |
| 8     | 462241.310 | 7108175.114 | 91.799 | CTP                          |
| 9     | 462244.640 | 7108170.912 | 91.991 | SEG CH477.685                |
| 10    | 462244.883 | 7108165.556 | 91.851 | PERP TO CUL CENTRE CH472.324 |
| 11    | 462242.311 | 7108160.781 | 91.171 | CTP CH467.645                |
| 12    | 462240.361 | 7108155.710 | 90.667 | MID R30.725 CH462.647        |
| 13    | 462239.827 | 7108150.303 | 90.116 | TP CH457.263                 |
| 14    | 462236.467 | 7108167.857 | 91.700 | CULDESAC CENTRE CH474.927    |

RAD 20.275 (LIP) ARC LENGTH 10.899  
RAD 8.725 (LIP) ARC LENGTH 38.838  
RAD 20.275 (LIP) ARC LENGTH 13.2783

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designed AH datum AHD  
drawn MM  
checked ADT Origin (B.M.) PSM 54085  
RL 82.078

approved  
SURVEYED BY  
MURRAY & ASSOCIATES  
PHONE 5441 2188

project  
OPERATIONAL WORKS FOR 20  
LOTS DA15764 BRUCE  
HIGHWAY (NORTH) CHATSWORTH  
STAGE 2

Client  
ROBERTS BROTHERS PTY LTD.

title  
ROAD 3 CUL-DE-SAC SETOUT  
& DRAINAGE DETAILS

Lot 371, 372 & 374  
ON MCH4667  
PARISH OF GYMPIE  
COUNTY : MARCH  
GYMPIE REGIONAL COUNCIL  
LOCALITY : CHATSWORTH

SCALE  
0 1.25 2.5 3.75 5 6.25 Meters 12.5  
scale  
1:250(A3)  
SCALE SHOWN IS ORIGINAL DRAWING SCALE  
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| REVISIONS | revision details      | date  |
|-----------|-----------------------|-------|
| B         | AMENDED POINTS 1 & 13 | 03/17 |
| O         | AS CONSTRUCTED        | 02/18 |

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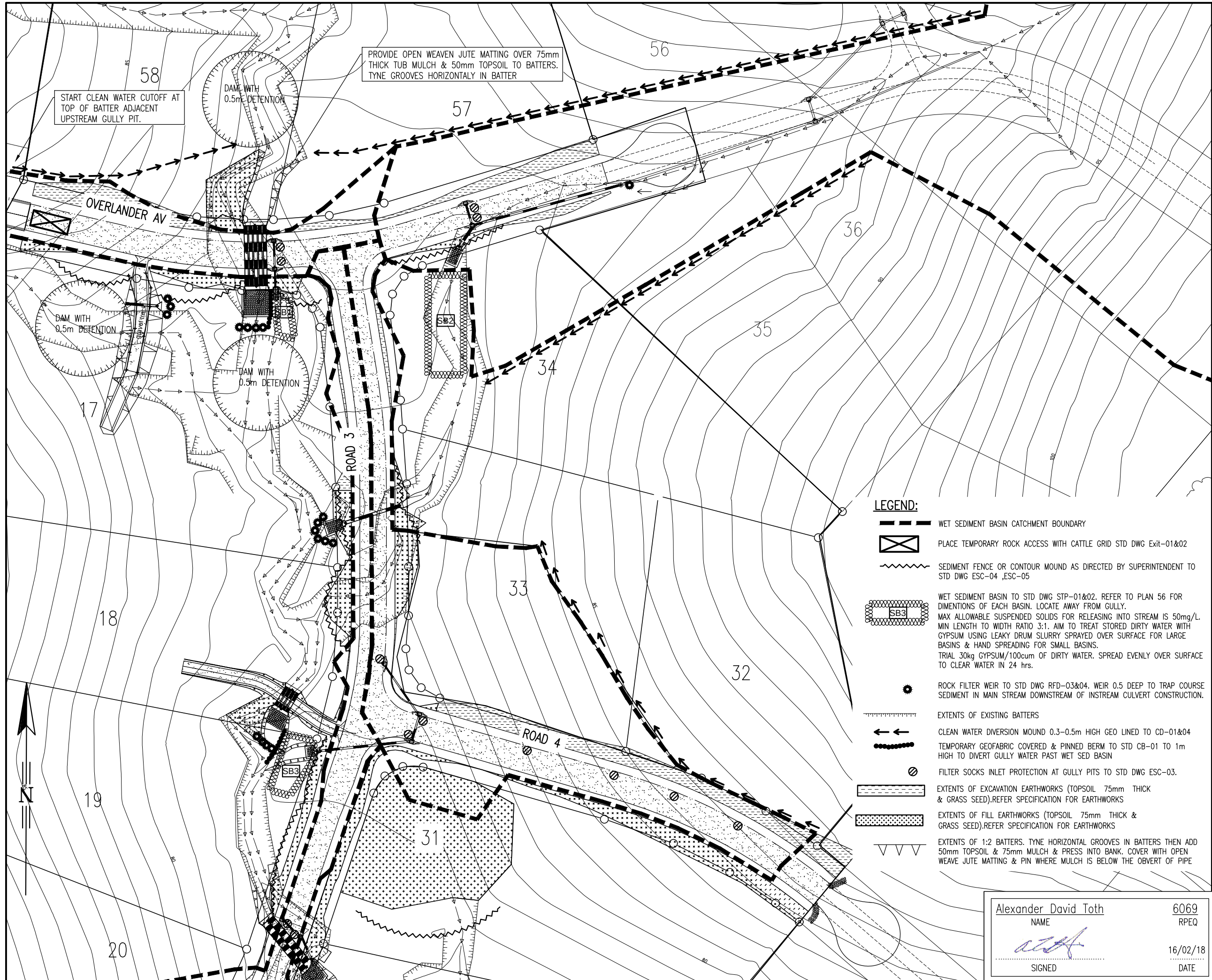
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date 20th January 2011





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| designed | AH  | datum AHD     |                        |
| drawn    | MM  |               |                        |
| checked  | ADT | Origin (B.M.) | PSM 54085<br>RL 82.078 |
| approved |     |               |                        |

SURVEYED BY  
**MURRAY & ASSOCIATES**  
PHONE 5441 2188

project

OPERATIONAL WORKS FOR 20 LOTS DA15764 BRUCE HIGHWAY (NORTH) CHATSWORTH STAGE 2

Client

ROBERTS BROTHERS PTY LTD.

title

SEDIMENT & EROSION CONTROL PLAN 1

Lot 371, 372 & 374 ON MCH4667

PARISH OF GYMPIE

COUNTY : MARCH

GYMPIE REGIONAL COUNCIL

LOCALITY : CHATSWORTH

SCALE

0 5 10 15 20 25 Meters 50

scale 1:1000(A3)

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REVISIONS

| revision | revision details                    | date  |
|----------|-------------------------------------|-------|
| A        | AMEND TO SUIT NEW ROAD WIDTH        | 12/11 |
| B        | ADD SEDIMENT BASIN SIZING & DETAILS | 04/17 |
| O        | AS CONSTRUCTED                      | 02/18 |

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Sheet 25 of 26 sheets

drawing number  
**0828-55**  
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date 20th January 2011

Alexander David Toth

NAME

SIGNED

6069

RPEQ

16/02/18

DATE



Alexander David Toth  
NAME  
*ADT*  
SIGNED  
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RPEQ  
16/02/18  
DATE

## Callaghan & Toth

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|----------|-----|---------------|------------------------|
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| drawn    | MM  |               |                        |
| checked  | ADT | Origin (B.M.) | PSM 54085<br>RL 82.078 |

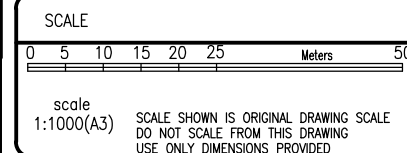
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**MURRAY & ASSOCIATES**  
PHONE 5441 2188

project  
**OPERATIONAL WORKS FOR 20  
LOTS DA15764 BRUCE  
HIGHWAY (NORTH) CHATSWORTH  
STAGE 2**

Client  
**ROBERTS BROTHERS PTY LTD.**

title  
**SEDIMENT & EROSION  
CONTROL PLAN 2**

**Lot 371, 372 & 374  
ON MCH4667  
PARISH OF GYMPIE  
COUNTY : MARCH  
GYMPIE REGIONAL COUNCIL  
LOCALITY : CHATSWORTH**



| REVISIONS |                                     |       |
|-----------|-------------------------------------|-------|
| no        | revision details                    | date  |
| A         | AMENDED SUIT NEW ROAD WIDTH         | 12/11 |
| B         | ADD SEDIMENT BASIN SIZING & DETAILS | 04/17 |
| O         | AS CONSTRUCTED                      | 02/18 |

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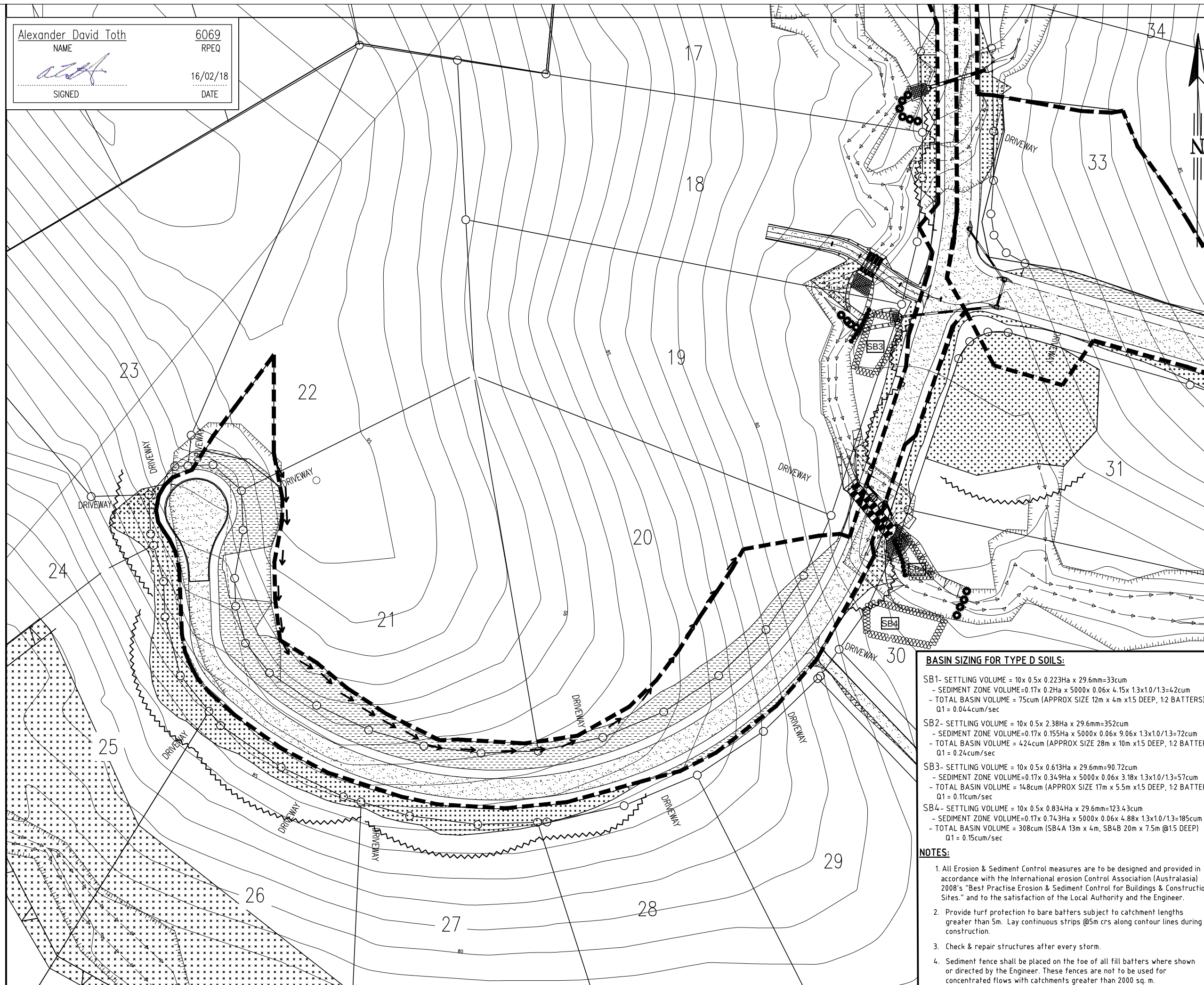
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**0828-56**  
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date 20th January 2011



### BASIN SIZING FOR TYPE D SOILS:

SB1- SETTLING VOLUME =  $10 \times 0.5 \times 0.223 \text{Ha} \times 29.6 \text{mm} = 33 \text{cum}$   
- SEDIMENT ZONE VOLUME =  $0.17 \times 0.2 \text{Ha} \times 5000 \times 0.06 \times 4.15 \times 1.3 \times 1.0 / 1.3 = 4.2 \text{cum}$   
- TOTAL BASIN VOLUME = 75 cum (APPROX SIZE 12m x 4m x 1.5 DEEP, 1:2 BATTERS)  
Q1 = 0.044 cum/sec

SB2- SETTLING VOLUME =  $10 \times 0.5 \times 2.38 \text{Ha} \times 29.6 \text{mm} = 352 \text{cum}$   
- SEDIMENT ZONE VOLUME =  $0.17 \times 0.155 \text{Ha} \times 5000 \times 0.06 \times 9.06 \times 1.3 \times 1.0 / 1.3 = 72 \text{cum}$   
- TOTAL BASIN VOLUME = 424 cum (APPROX SIZE 28m x 10m x 1.5 DEEP, 1:2 BATTERS)  
Q1 = 0.24 cum/sec

SB3- SETTLING VOLUME =  $10 \times 0.5 \times 0.613 \text{Ha} \times 29.6 \text{mm} = 90.72 \text{cum}$   
- SEDIMENT ZONE VOLUME =  $0.17 \times 0.349 \text{Ha} \times 5000 \times 0.06 \times 3.18 \times 1.3 \times 1.0 / 1.3 = 57 \text{cum}$   
- TOTAL BASIN VOLUME = 148 cum (APPROX SIZE 17m x 5.5m x 1.5 DEEP, 1:2 BATTERS)  
Q1 = 0.11 cum/sec

SB4- SETTLING VOLUME =  $10 \times 0.5 \times 0.834 \text{Ha} \times 29.6 \text{mm} = 123.43 \text{cum}$   
- SEDIMENT ZONE VOLUME =  $0.17 \times 0.743 \text{Ha} \times 5000 \times 0.06 \times 4.88 \times 1.3 \times 1.0 / 1.3 = 185 \text{cum}$   
- TOTAL BASIN VOLUME = 308 cum (SB4A 13m x 4m, SB4B 20m x 7.5m @ 1.5 DEEP)  
Q1 = 0.15 cum/sec

### NOTES:

- All Erosion & Sediment Control measures are to be designed and provided in accordance with the International erosion Control Association (Australasia) 2008's "Best Practise Erosion & Sediment Control for Buildings & Construction Sites." and to the satisfaction of the Local Authority and the Engineer.
- Provide turf protection to bare batters subject to catchment lengths greater than 5m. Lay continuous strips @ 5m crs along contour lines during construction.
- Check & repair structures after every storm.
- Sediment fence shall be placed on the toe of all fill batters where shown or directed by the Engineer. These fences are not to be used for concentrated flows with catchments greater than 2000 sq. m.
- Remove sediment fence only after new grass is established.